

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A method of treating or inhibiting thrombosis in a subject having hypertension comprising administering to the subject a composition comprising an effective amount of a PSGL-1 protein having a P-selectin ligand activity chosen from at least one of:

a) ~~antagonizing P-selectin or E-selectin;~~

[[b)]] a) inhibiting P-selectin or E-selectin binding;

[[c)]] b) inhibiting adhesion of at least one of leukocytes to endothelial cells, leukocytes to platelets, leukocytes to blood vessels, and platelets to blood vessels;

[[d)]] c) inhibiting leukocyte recruitment to platelets and endothelial cells;

[[e)]] d) increasing leukocyte migration;

[[f)]] e) increasing movement of at least one of leukocytes and platelets relative to blood vessels; and

[[g)]] f) increasing leukocyte rolling velocity.

2. (Previously presented) The method of claim 1, wherein the PSGL-1 protein is a soluble PSGL-1 protein or a fragment thereof having a P-selectin ligand activity.

3. (Original) The method of claim 2, wherein the soluble PSGL-1 protein is human PSGL-1.

4. (Original) The method of claim 2, wherein the soluble PSGL-1 protein is a recombinant protein.
5. (Original) The method of claim 2, wherein the soluble PSGL-1 protein comprises an Fc portion of an immunoglobulin.
6. (Original) The method of claim 5, wherein the immunoglobulin is human IgG1.
7. (Original) The method of claim 2, wherein the soluble PSGL-1 protein is a recombinant human PSGL-Ig fusion protein.
8. (Previously presented) The method of claim 2, wherein the soluble PSGL-1 protein comprises an extracellular domain of human PSGL-1 protein or a fragment thereof, capable of treating or inhibiting thrombosis.
9. (Original) The method of claim 8, wherein the fragment comprises the amino acid sequence set forth in SEQ ID NO:2 from amino acid 42 to amino acid 60.
10. (Original) The method of claim 8, wherein the fragment comprises the amino acid sequence set forth in SEQ ID NO:2 from amino acid 42 to amino acid 88.
11. (Original) The method of claim 8, wherein the fragment comprises the amino acid sequence set forth in SEQ ID NO:2 from amino acid 42 to amino acid 118.
12. (Original) The method of claim 8, wherein the fragment comprises the amino acid sequence set forth in SEQ ID NO:2 from amino acid 42 to amino acid 189.
13. (Original) The method of claim 8, wherein the fragment comprises the amino acid sequence set forth in SEQ ID NO:2 from amino acid 42 to amino acid 310.

14. (Original) The method of claim 2, wherein the soluble PSGL-1 protein comprises the amino acid sequence from amino acid 42 to amino acid 88 of SEQ ID NO:2 fused at its C-terminus to an Fc portion of an immunoglobulin.
15. (Original) The method of claim 8, wherein the soluble PSGL-1 protein further comprises an Fc portion of an immunoglobulin.
16. (Original) The method of claim 1, wherein the subject is human.
17. (Previously presented) The method of claim 1, wherein the PSGL-1 protein is administered to the subject prior to thrombus formation.
18. (Original) The method of claim 2, wherein the effective amount of soluble PSGL-1 protein or fragment thereof is between approximately 0.1 mg/kg and 10 mg/kg.
19. (Original) The method of claim 18, wherein the effective amount of soluble PSGL-1 protein is approximately 1 mg/kg.
20. (Previously presented) The method of claim 18, wherein the effective amount of soluble PSGL-1 protein is chosen from 0.1 mg/kg, 0.25 mg/kg, 0.5 mg/kg, 0.75 mg/kg, 1.0 mg/kg, 1.25 mg/kg, 1.5 mg/kg, 1.75 mg/kg, 2.0 mg/kg, 2.25 mg/kg, 2.5 mg/kg, 3.0 mg/kg, and 3.5 mg/kg.
- 21-24. (Canceled)
25. (Currently amended) A method for inhibiting thrombus formation induced by a thrombus-inducing agent in a subject comprising identifying a subject having hypertension and administering to the subject a composition comprising an effective

amount of soluble PSGL-1 protein or a fragment thereof having a P-selectin ligand activity chosen from at least one of:

a) ~~antagonizing P-selectin or E-selectin;~~

[[b)]] a) inhibiting P-selectin or E-selectin binding;

[[c)]] b) inhibiting adhesion of at least one of leukocytes to endothelial cells, leukocytes to platelets, leukocytes to blood vessels, and platelets to blood vessels;

[[d)]] c) inhibiting leukocyte recruitment to platelets and endothelial cells;

[[e)]] d) increasing leukocyte migration;

[[f)]] e) increasing movement of at least one of leukocytes and platelets relative to blood vessels; and

[[g)]] f) increasing leukocyte rolling velocity.

26. (Previously presented) The method of claim 25, wherein the soluble PSGL-1 protein or fragment thereof having a P-selectin ligand activity comprises a non-PSGL-1 amino acid sequence.

27. (Original) The method of claim 25, wherein the thrombus-inducing agent is LTC₄.

28. (Canceled)

29. (Withdrawn) The method of claim 1, wherein the subject has a condition chosen from prolonged sitting, bed rest and immobilization.

30. (Withdrawn) The method of claim 1, wherein the subject is at risk of thrombosis due to a vascular procedure chosen from angioplasty, surgical revascularization, balloon angioplasty, laser angioplasty, percutaneous transluminal coronary angioplasty, coronary artery bypass grafting, rotational atherectomy, stenting, and coronary artery stenting.

31. (Currently amended) A method of preventing or treating deep vein thrombosis, comprising identifying a subject having or at risk for deep vein thrombosis and administering to a subject a composition comprising an effective amount of a soluble PSGL-1 protein or a fragment thereof having a P-selectin ligand activity chosen from at least one of:

a) ~~antagonizing P-selectin or E-selectin;~~

[[b)]] a) inhibiting P-selectin or E-selectin binding;

[[c)]] b) inhibiting adhesion of at least one of leukocytes to endothelial cells, leukocytes to platelets, leukocytes to blood vessels, and platelets to blood vessels;

[[d)]] c) inhibiting leukocyte recruitment to platelets and endothelial cells;

[[e)]] d) increasing leukocyte migration;

[[f)]] e) increasing movement of at least one of leukocytes and platelets relative to blood vessels; and

[[g)]] increasing leukocyte rolling velocity.

32. (Previously presented) The method of claim 31, wherein the soluble PSGL-1 protein or fragment thereof is a human PSGL-1.

33. (Previously presented) The method of claim 31, wherein the soluble PSGL-1 protein or fragment thereof comprises an extracellular domain of human PSGL-1 protein.
34. (Previously presented) The method of claim 31, wherein the soluble PSGL-1 protein or fragment thereof comprises amino acid 42 to amino acid 60 of SEQ ID NO:2.
35. (Previously presented) The method of claim 31, wherein the soluble PSGL-1 protein or fragment comprises the amino acid sequence set forth in SEQ ID NO:2 from amino acid 42 to amino acid 88.
36. (Previously presented) The method of claim 31, wherein the soluble PSGL-1 protein or fragment thereof comprises a non-PSGL-1 amino acid sequence.
37. (Previously presented) The method of claim 36, wherein the non-PSGL-1 amino acid sequence comprises an Fc portion of an immunoglobulin.
38. (Previously presented) The method of claim 37, wherein the soluble PSGL-1 protein or fragment comprises the amino acid sequence from amino acid 42 to amino acid 60 of SEQ ID NO:2.
39. (Previously presented) The method of claim 37, wherein the soluble PSGL-1 protein or fragment comprises the amino acid sequence from amino acid 42 to amino acid 88 of SEQ ID NO:2.
40. (Previously presented) The method of claim 31, wherein the subject is at risk for deep vein thrombosis due to hypertension.
- 41-42.(Canceled)

43. (Withdrawn) The method of claim 31, wherein the subject is at risk for deep vein thrombosis due to prolonged sitting, bed rest or immobilization.

44. (Withdrawn) The method of claim 31, wherein the subject is at risk for deep vein thrombosis due to a vascular procedure chosen from angioplasty, surgical revascularization, balloon angioplasty, laser angioplasty, percutaneous transluminal coronary angioplasty, coronary artery bypass grafting, rotational atherectomy, stenting, and coronary artery stenting.

45. (Currently amended) A prophylactic method of treating or inhibiting thrombosis in a human subject comprising identifying a subject at risk of thrombosis due to hypertension and administering to the subject a composition comprising an effective amount of a PSGL-1 protein or a fragment thereof having a P-selectin ligand activity chosen from at least one of:

a) ~~antagonizing P-selectin or E-selectin;~~

[[b)]] a) inhibiting P-selectin or E-selectin binding;

[[c)]] b) inhibiting adhesion of at least one of leukocytes to endothelial cells, leukocytes to platelets, leukocytes to blood vessels, and platelets to blood vessels;

[[d)]] c) inhibiting leukocyte recruitment to platelets and endothelial cells;

[[e)]] d) increasing leukocyte migration;

[[f)]] e) increasing movement of at least one of leukocytes and platelets relative to blood vessels; and

[[g)]] f) increasing leukocyte rolling velocity.

46. (Withdrawn) The method of claim 45, wherein the subject is at risk of thrombosis due to a disorder, condition or procedure chosen from:

- (a) a cardiovascular disease or disorder;
- (b) prolonged sitting, bed rest, or immobilization; and
- (c) a surgical procedure.

47. (Withdrawn) The method of claim 46, wherein the cardiovascular disease or condition is chosen from hypertension, arterial inflammation, rapid ventricular pacing, aortic bending, vascular heart disease, atrial fibrillation, congestive heart failure, sinus node dysfunction, angina, heart failure, atrial flutter, cardiomyopathy, coronary artery disease, coronary artery spasm, and arrhythmia.

48. (Withdrawn) The method of claim 46, wherein the subject is at risk of thrombosis due to immobilization due to medical or surgical illness.

49. (Withdrawn) The method of claim 46, wherein the surgical procedure is chosen from a vascular procedure, angioplasty, surgical revascularization, balloon angioplasty, laser angioplasty, percutaneous transluminal coronary angioplasty, coronary artery bypass grafting, rotational atherectomy, stenting, and coronary artery stenting.

50. (Previously presented) The method of claim 45, wherein the soluble PSGL-1 protein is a human PSGL-1.

51. (Previously presented) The method of claim 45, wherein the soluble PSGL-1 protein or fragment thereof comprises an extracellular domain of human PSGL-1 protein.

52. (Previously presented) The method of claim 45, wherein the soluble PSGL-1 protein or fragment thereof comprises amino acid 42 to amino acid 60 of SEQ ID NO:2.

53. (Previously presented) The method of claim 45, wherein the soluble PSGL-1 protein or fragment thereof comprises amino acid 42 to amino acid 88 of SEQ ID NO:2.

54. (Previously presented) The method of claim 45, wherein the soluble PSGL-1 protein or fragment thereof comprises a non-PSGL-1 amino acid sequence.

55. (Previously presented) The method of claim 54, wherein the non-PSGL-1 amino acid sequence comprises an Fc portion of an immunoglobulin.

56. (Previously presented) The method of claim 55, wherein the soluble PSGL-1 protein or fragment comprises the amino acid sequence from amino acid 42 to amino acid 60 of SEQ ID NO:2.

57. (Currently amended) A method for treating, inhibiting, or preventing thrombosis in a subject at risk of thrombosis comprising identifying a human subject at risk of thrombosis due to hypertension and administering to the subject a composition comprising an effective amount of a soluble PSGL-1 protein or fragment thereof having a P-selectin activity chosen from at least one of:

a) ~~antagonizing P-selectin or E-selectin;~~

[[b)]] a) inhibiting P-selectin or E-selectin binding;

[[c)]] b) inhibiting adhesion of at least one of leukocytes to endothelial cells, leukocytes to platelets, leukocytes to blood vessels, and platelets to blood vessels;

[[d)]] c) inhibiting leukocyte recruitment to platelets and endothelial cells;

[[e)]] d) increasing leukocyte migration;

[[f)]] e) increasing movement of at least one of leukocytes and platelets relative to blood vessels; and

[[g)]] f) increasing leukocyte rolling velocity.